

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this application:

1-21. (Canceled)

22. (Currently Amended) A method of detecting a gene activation event in a cell ~~*in vitro* or *in vivo*~~, the method comprising assaying a ~~host cell stably transfected with a nucleic acid construct comprising a nucleic acid sequence encoding a member of the lipocalin protein family,~~ or a transgenic ~~rodent non-human animal~~ whose cells express a nucleic acid construct comprising a nucleic acid sequence encoding beta-lactoglobulin ~~such a construct~~, in which the ~~rodent cell or animal~~ is subjected to a gene activation event that is signaled by expression of a peptide tagged ~~lipocalin~~ beta-lactoglobulin reporter gene.

23. (Currently Amended) The method of claim 22, wherein the ~~lipocalin~~ beta-lactoglobulin protein is heterologous to the cell in which it is expressed.

24. (Currently Amended) The method of claim 22, wherein the ~~lipocalin~~ beta-lactoglobulin protein is coded for by a nucleic acid construct comprising (i) a nucleic acid sequence encoding beta-lactoglobulin ~~a member of the lipocalin protein family~~, and (ii) a nucleic acid sequence encoding a peptide sequence of from 5 to 250 amino acid residues.

25. (Currently Amended) The method of claim 22, wherein the ~~lipocalin~~ beta-lactoglobulin is ~~selected from the group consisting of:~~ ovine betalactoglobulin (BLG) (SEQ ID NO: 23) (accession No. X12817), murine major urinary protein (MUP) (accession No. NM 031188) and ~~rat α -2 urinary globulin (α -2u) (accession number M27434).~~

26. (Previously Presented) The method of claim 24, wherein the peptide sequence is an epitope.
27. (Previously Presented) The method of claim 26, wherein the epitope is selected from the group consisting of EQKLISEEDL (SEQ ID NO: 1), GKPIPPLLGLDST (SEQ ID NO: 2), YPYDVPDYA (SEQ ID NO: 3), NVRFSTIVRRRA (SEQ ID NO: 4), KQMSDRRENDMSPS (SEQ ID NO: 5), SGNEVSRAVLLPQSC (SEQ ID NO: 6), SSLSYTNPAVAATSANL (SEQ ID NO: 7), RSTLQHPDYLQEYST (SEQ ID NO: 8), VSTLLRWERFPGHRQA (SEQ ID NO: 9), KFQQLVQCLTEFHAALGAYV (SEQ ID NO: 10), QEQCQEVWRKRVISAFKSP (SEQ ID NO: 11), and RLSDKTGPVAQEKS (SEQ ID NO: 12).
28. (Currently Amended) The method of claim 23, wherein the construct additionally comprises a promoter element upstream of the nucleic acid sequence comprising (i) a nucleic acid sequence encoding beta-lactoglobulin ~~a member of the lipocalin protein family~~, and (ii) ~~a~~ and nucleic acid sequence encoding a peptide sequence of from 5 to 250 amino acid residues.
29. (Canceled)
30. (Currently Amended) The method of claim 22, wherein the nucleic acid construct comprises a stress inducible promoter which is operatively isolated from a nucleic acid sequence encoding beta-lactoglobulin ~~a member of the lipocalin protein family~~ by a nucleotide sequence flanked by nucleic acid sequences recognized by a site specific recombinase, or by insertion such that it is inverted with respect to the transcription unit encoding beta-lactoglobulin ~~a member of the lipocalin protein family~~, in which the construct additionally comprises a nucleic acid

sequence comprising a tissue specific promoter operatively linked to a gene encoding the coding sequence for the site specific recombinase.

31. (Previously Presented) The method of claim 30, wherein the site-specific recombinase sequences are two *loxP* sites of bacteriophage P1.

32. (Previously Presented) The method of claim 22, wherein the gene activation event is induction of toxicological stress, metabolic changes, or disease, including a disease that is the result of viral, bacterial, fungal or parasitic infection.

33. (Currently Amended) A method of screening for, or monitoring of toxicologically induced stress in a transgenic rodent cell or a cell line or a non-human animal, comprising the step of detecting a gene activation event in a cell *in vivo*, comprising assaying said transgenic rodent whose cells express a nucleic acid construct as defined in claim 24, in which the rodent is subjected to a gene activation event that is signaled by expression of a peptide tagged beta-lactoglobulin reporter gene, wherein the gene activation event is the result of toxicological stress ~~the use of a rodent cell, cell line or non-human animal which has been transfected with or carries a nucleic acid construct as defined in claim 24.~~

34. (Currently Amended) A method for screening and characterizing viral, bacterial, fungal, and parasitic infection comprising the use of a transgenic rodent cell, cell line or non-human animal ~~which has been transfected with or carries a nucleic acid construct as defined in claim 24.~~

35. (Currently Amended) A method for screening for cancer, inflammatory disease, cardiovascular disease, metabolic disease, neurological disease and disease with a genetic basis

comprising the use of a transgenic rodent cell, ~~cell line or non human animal~~ which ~~has been~~
~~transfected with or~~ carries a nucleic acid construct as defined in claim 24.